<u>REMARKS</u>

Claims 1, 4, 7, 11, 14, 17 and 20 are amended. Claims 1-7, 11-14 and 17-20 are pending herein.

In the previous Office Action, Claims 1-22 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1-7, 11-14 and 17-20 were faulted as being indefinite regarding the use of the language "median particle size, by volume" and "a span value, <u>by volume</u>" because it is unclear as to what the volume is (in terms of amount)." The term "by volume" indicates that the span value or particle size is measured by counting the volume of the particles and not by the number of particles. "Mean particle size" and "span value" are a measure of the particle diameter and the definitions of these terms are found in paragraph [0027] of the subject application. Thus, these claims are not indefinite.

Claims 1-7, 11-14 and 17-20 stand rejected under 35 U.S.C. §102(b) or 103(a) over WO 01/98201 or U.S. Patent No. 6,527,817 (Fang et al.). This rejection is respectfully traversed.

Fang et al. documents describe polishing compositions that include colloidal silica. They do not disclose a <u>span value</u> for the abrasive. Moreover, Fang et al. only teaches a polishing dispersion with a particle size distribution defined by <u>number</u>. This will not necessarily result in the same particle size distribution defined by <u>volume</u>.

The definition of a particle size distribution by <u>number</u> can be significantly different than the definition of a particle size distribution by <u>volume</u>. For example, the particle distribution span by <u>number</u> may be significantly different than the particle distribution span value by <u>volume</u> since measurement by number does not take into account the volume of the particle. Thus, when defining particle size by <u>number</u> distribution or span value, if one very large particle is present, it will not significantly affect the distribution, whereas when defining a particle size distribution by <u>volume</u>, such a particle would significantly affect the distribution.

Inherent anticipation requires that the missing descriptive material is "necessarily present," not merely probably or possibly present in the prior art. *Trinteo Industries v. Top U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Additionally, facts asserted to be inherent in the prior art must be shown by evidence from the prior art. *Elan Pharmaceuticals, Inc. v. Mayo Foundation for Medical Education and*

*Research*, 304 F.3d 1221, USPQ2d 1292 (Fed. Cir. 2001). *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (criticizing the "hindsight syndrome wherein that which only the inventor taught is used against its teacher").

The above-identified Fang et al. documents do not teach a <u>span value</u> and only teach a polishing dispersion with a particle size distribution defined by <u>number</u>. Since there is no disclosure of the span value, there is no way for Applicants to determine such a value from the Fang et al. documents, especially since the particle size distributions set forth therein are measured by <u>number</u>. For example, Fang et al. describes on page 3, line 34 to page 4, line 9 that the particles describe therein may possess a $\sigma_g$ ($\sigma_g = d_{84}/d_{16}$) value of at least about 1.1, and preferably 1.8 – 2.3. Fang et al. also mentions that the particles may become more polydispersed as the $\sigma_g$ value increases above 1. The attached declaration demonstrates that a large $\sigma_g$ value for particle size distribution by <u>number</u> does not necessarily result in a large span value for a particle size distribution by <u>volume</u> (see Fig 1a). Moreover, a lower $\sigma_g$ for a particle size distribution by <u>number</u> may result in a large span value for a particle size distribution by <u>volume</u> (see Figure 2a). Thus, the declaration from the inventor demonstrates that the Fang et al. references would not necessarily possess the recited span value, by number, of the present claims.

Accordingly, it is submitted that the subject matter of claims 1-7, 11-14 and 17-20 are not inherently disclosed by the above-identified references, and Applicants respectfully request withdrawal of the §102 rejection.

As above-mentioned, the cited references do not even remotely suggest polishing dispersions having a particular <u>span value</u> and do not mention particle size distribution defined by <u>volume</u>. Moreover, they do not even remotely suggest why or how to obtain such a span value, or why the artisan would want a particular <u>span value</u>. The examiner bears the burden of establishing a *prima facie* case of obviousness, *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995), *In re Rijckaert, 9*: F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ 2d 1443, 1444 (Fed. Cir. 1992). Only if this burden is met does the burden of coming forward with rebuttal argument or evidence shift to the applicant. *Rijckaert*, 9 F.3d at 1532, 28 USPQ2d at 1956. When the references cited by the examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

The combination of elements in a manner that reconstructs the applicant's invention only with the benefit of hindsight is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge can not come from the applicant's invention itself. *Diversitech Corp v. Century Steps, Inc.,* 850 F.2d 675. 678-79, 7 USPQ2d 1315, 1318 (Fed. Cir. 1988); *In re Geiger,* 815 F.2d 686, 687, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); *Interconnect Planning Corp. v. Feil,* 774 F.2d 1132, 1147, 227 USPQ 543,551 (Fed. Cir. 1985).

In the present case, Applicants submit the span value is a desirable feature that provides improved planarization in the formulation (see the Examples of the present application where small abrasive span values in CMP formulations provides inferior results). In addition, the above-mentioned declaration clearly demonstrates that a particle size distribution defined by number may be significantly different than that defined by volume, especially with regard to span value. There is simply no reference to or description of span value or particle size distribution by volume, and thus, no suggestion in Fang et al. of the polishing compositions recited in claims 1-7, 11-14 and 17-20. In addition, the artisan would have been motivated, after reviewing the Fang et al. references, to produce a particle size distribution having a $\sigma_g$ value, by number, of at least 1.1 and not a span value, by volume, as recited in the present claims.

Therefore, Applicants submit that no *prima facie* case of obviousness has been set forth in the Office Action.

Accordingly, it is submitted that the subject matter of claims 1-7, 11-14 and 17-20 are not rendered obvious by the above-mentioned references. Applicants respectfully request withdrawal of this rejection.

In view of the above remarks, Applicants earnestly solicit the withdrawal of the rejections set forth in the September 8, 2008, Office Action and notification to that effect in the form of a Notice of Allowability.

Respectfully submitted,

William D. Bunch
Attorney for Applicant
Reg. No. 35,027

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W. R. Grace & Co.-Conn.
7500 Grace Drive
Columbia, Maryland 21044
(410) 531-4333